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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/701,963	12/05/2000	Heike Wild	IN-12062	9810

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BASF Corporation
1609 Biddle Avenue
Wyandotte, MI 48192

EXAMINER

BISSETT, MELANIE D

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 01/09/2002

6

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/701,963

Applicant(s)

WILD ET AL.

Examiner

Melanie Bagwell-Bissett

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Objections

1. Claim 5 is objected to because of the following informalities: The modulus of elasticity is claimed as .275 MPa. It is believed that this is a typographical error meant to be ">275 MPa", since the original claim recites ">275 MPa". Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 3 requires 40-98% by weight of component (b1), 1-60% by weight of (b2), and 1-50% by weight of (b3). In this case, a mixture containing 60% by weight of (b2) would contain a minimum of 40% by weight of (b1) and 1% of (b3) for a total of 101%. Thus, it is unclear whether the applicant intends to lessen the amount of (b2) (59% maximum) to allow the incorporation of (b3) or whether the applicant intends to claim (b3) as an optional component (0% by weight). Since claim 3 would fail to further limit the scope of claim 2 when (b3) is chosen as an optional component (0% by weight), it is the examiner's position to treat the claim as reading "(b2) from 1 to 59% by weight".

Summary of the Claims

5. Claim 1 is drawn to a composite element having layers of (i) 2-20 mm of metal, (ii) 10-100 mm of a reaction product of isocyanate with polyether polyols, and (iii) 2-20 mm of metal. Claim 5 limits layer (ii) to have specified adhesion, elongation, tensile strength, compressive strength, and modulus of elasticity properties. Claims 2-3 limit the polyether polyol component, and claim 4 limits layer (ii) to further comprise fillers. Claim 6 is drawn to a process for producing the elements of any of claims 1-5, where the material of layer (ii) is prepared between layers (i) and (iii). Claim 7 is drawn to a composite element obtained by the process of claim 6.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

7. Claims 1 and 5-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Kennedy.

8. Kennedy discloses a composite structure having two outer metal layers and an intermediate elastomer core layer, where the core layer has a modulus of elasticity

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greater than 250 MPa, tensile and compressive strengths greater than 20 MPa, and an adhesion of at least 3 MPa (abstract). Preferably, the elastomer is compact (col. 2 lines 50-54) and has a modulus of elasticity greater than 275 MPa (col. 3 lines 56-63), an elongation greater than 50% (col. 4 lines 12-15), and an adhesion to the metal layers of at least 6 MPa (col. 4 lines 26-30). Figure 3 shows a structure having two outer metal layers of 10-mm thickness and a core polyurethane layer of 50-mm thickness.

Polyurethanes of the invention are made by reacting an isocyanate with a polyether or polyester polyol, thus teaching reaction products of polyether polyols with isocyanates. The reference teaches a method of fabricating the composites by casting or injecting the elastomer into a cavity formed between the two outer metal layers (col. 5 lines 17-21). Thus, the reference teaches a process of preparing polyisocyanate polyaddition products between two metal layers.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kennedy.

11. Kennedy applies as above, failing to teach the requirement of fillers in a specified range. However, the reference does indicate that fillers may be included in the elastomer layer to reduce the thermal coefficient and reduce cost of the layer (col. 4

lines 39-46). Therefore, it is the examiner's position that it would have been prima facie obvious to include fillers in any amount necessary to reduce the thermal coefficient and the cost of the elastomer layer.

12. Claims 2-3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kennedy in view of Cline et al. Cline et al. (USPN 5,733,966) can be found on the applicant's Form PTO-1449.

13. Kennedy applies as above, lacking express mention of the composition of the polyether polyols used in the invention. Cline teaches highly elastic polyurethane adhesives (abstract) for applications to flexible substrates, where the adhesives can be applied in liquid form and cured so that the adhesives do not lose their adhesive strength at higher temperatures (col. 1 lines 48-60). It is taught that the adhesives of the invention adhere well to metal substrates (col. 7 line 56-col. 8 line 2). Exemplified polyurethane adhesives are made by blending 50% of a polyether triol having a molecular weight of about 2000 with 50% of a polyether diol having a molecular weight of 4000 and reacting the polyols with an isocyanate (example 2). The molecular weight and functionality of the polyether diol blend affect the softening point of the elastomers (table, col. 11). Therefore, it is the examiner's position that it would have been prima facie obvious to use polyether blends in Kennedy's invention according to Cline's teaching to provide adhesive elastomers usable with flexible substrates having improved adhesive strength at high temperatures.

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14. Kennedy also lacks mention of a blend of three polyols making the polyether polyol component. Cline applies as above, also noting the use of up to 10% of chain extenders having functionalities of 1.5-3 (abstract). The mention is made of the use of 1,10-decanediol, a compound with a hydrocarbon skeleton of 10 carbon atoms (col. 6 lines 7-22). Although the compound would be chosen from a list, the noted chain extenders are given as compounds that would each contribute to an equally improved urethane elastomer adhesive. Therefore, it is the examiner's position that it would have been prima facie obvious to include in the polyether polyol component a chain extender having at least 10 carbon atoms. Motivation for including this compound in a polyether component of Kennedy's invention would have been to provide an elastomer having equally improved adhesive strength at high temperatures.

Double Patenting

15. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

16. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225

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USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

17. Claims 5-7 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1, 5, and 6 of copending Application No. 09/701,905. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

18. When claim 6 depends from claim 5 of the present application, claims 5-6 of the copending application claim the same invention as claims 6-7 of the present application.

19. Claims 1-4 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-4 of U.S. Patent No. 09/701,905. Although the conflicting claims are not identical, they are not patentably distinct from each other because more narrow claims 1-4 of the copending application anticipate the broader present claims 1-4.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie Bagwell-Bissett whose telephone number is (703) 308-6539. The examiner can normally be reached on M-F 8-4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (703) 308-2462. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

mdb
January 4, 2002


James Seidleck
Supervisor
Art Unit 1711
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